REMARKS/ARGUMENTS

In view of the following discussion, the Applicants submit that none of the claims now pending in the application is obvious under the provisions of 35 USC § 103. Thus, the Applicants believe that all of these claims are now in allowable form.

If the Examiner believes that there are any unresolved issues in any of the claims now pending in the application, the Examiner is urged to telephone Ms. Alberta A. Vitale, Esq. at (203) 469-8097 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Rejections under 35 U.S.C. § 103

The Office action has rejected claims 1-3 and 11-13 under the provisions of 35 USC § 103 as being obvious over the teachings in the Haung patent (United States patent 6,571,245 issued to Erwin S. Haung et al. on May 27, 2003 (hereinafter Haung)) taken in view of the Wei patent (United States patent 6,654,784 issued to Coach Wei (hereinafter Wei).

The Office action has also rejected claims 4-10 and 14-20 under the provisions of 35 USC § 103 as being obvious over the teachings in Haung and Wei as applied to claims 3 and 13 respectively, in view of the Zhu patent

(United States patent 6,691,154 issued to Min Zhu et al. (hereinafter Zhu).

These rejections are respectfully traversed. For simplification, the Applicants will specifically discuss these rejections in the context of independent claims 1 and 11 from which claims 2-10 and 12-20 depend, respectively.

Since claim 1 (apparatus) and claim 11 (method) contain highly similar limitations, and since the Office action recites the same rejection, including citations to the art, for claim 11 as for claim 1, Applicants will discuss the rejections with respect to claim 1.

Claim 1

Claim 1 is recited as follows:

> Apparatus for providing a web-accessible virtual processing environment to a network-connected office server for a remotely connected user computer through which a user stationed at the computer can execute any of a plurality of server-based applications resident at the office server, comprising:
> a **platform**, capable of being situated in network communication between the user computer and the office server, having:
> a processor;
> a memory connected to the processor and for storing computer executable instructions therein;
> first and second network interfaces, operable in conjunction with the processor, for interfacing the platform, through the first network interface, to a

wide area network (WAN) connection through
which the remote user computer obtains
connectivity to the platform, and, through
the second network interface, to a local
area network (LAN) having a server
computer electrically communicative
thereover, respectively, with the server
computer forming the office server; and

wherein, in response to the
executable instructions, the processor,
for each one of the server-based
applications:

provides, through a
corresponding client application
module implemented on the platform
for each of the server-based
applications, bi-directional
protocol conversion of messages
between the remote user computer and
the office server, such that user
interaction data, intended for a
specific one of the server-based
applications and provided by a
browser executing on the remote user
computer in a first protocol, is
converted into a second protocol
associated with said one
server-based application and then
applied to the server-based
application at the office server,
and output data, provided by said
specific one server-based
application, is converted from the
second protocol to the first
protocol for being transmitted to
the user computer and graphically
rendered thereat, through the
browser, to the user. (Emphasis
added).

The Office Action at paragraph 4, page 3 states
that "Haung Figure 2 and Col. 4, lines 18-46" teaches "a
platform, capable of being situated in network

communication between the user computer and the office

server." (Emphasis added). Applicants note that the

citation of Haung, col. 4, lines 18-46, states:

> FIG. 2 shows a diagram of an embodiment of a
> computer network 200 that implements a
> virtual computing environment and supports
> the virtual desktop of the invention. Within
> network 200, a number of computer
> systems 210 couples to the Internet 220
> through various communications links
> described above. Computer systems 210 can
> represent the various systems depicted in
> FIG. 1. The Internet 220 is a collection of
> networks that allows files and resources on
> computers interconnected to the networks to
> be shared. A site server 230 also couples to
> the Internet 220 through a firewall 232.
> Firewall 232 provides a security wall
> between site server 230 and the Internet 220
> and is discussed in further detail below.
>
> Site server 230 is a Uniform Resource
> Locator (URL) site (e.g., MAGICALLY.COM) to
> which computer systems 210 connect. Site
> server 230 processes a user's login, which
> typically includes receiving the user's
> identification and password. Site server 230
> couples to, and provides the login
> information to, a controller server 240.
> Controller server 240 checks the login
> information against a database 242 of login
> information to determine whether the user is
> authorized for access to the network. If the
> user is authorized, controller server 240
> determines the appropriate Hypertext
> Transport Protocol (HTTP) server to which
> the user should be directed. In a large
> network that includes more than one backend
> server, controller server 240 directs the
> user computer system to the appropriate
> (i.e., the least congested) backend server.
> In an embodiment, site server 230 and

> controller <u>server</u> 240 are integrated into
> one <u>server</u>. (<u>Emphasis added</u>).

The Office action further cites Figure 2 and also states, in what appears to be an interpretation of the citation: "[s]ite <u>server</u>, which provides link for computers to connect to backend, i.e. office servers, sits between the computers and office LAN." (<u>Emphasis added</u>).

However, Applicants respectfully note that neither Figure 2, nor the above quoted citation make any reference to Applicants' claimed "**platform**" (claim 1, clause 1, <u>emphasis added</u>). Nor, for that matter is platform described anywhere in Haung, cited or not. It appears that the Office action is using the citation to show a teaching of networks and servers. Nowhere in the citation is their any teaching of Applicants' platform or SEP (Service Enablement Platform), which is described at length in the specification and is illustrated in Figure 1 (200) and Figure 2 (high-level block diagram of SEP 200). Applicants' specification states:

> In accordance with our inventive
> teachings and as described in
> considerable detail below, <u>SEP 200</u>
> <u>provides a front end to server 70 for</u>
> <u>implementing secure, remote, web-based</u>
> <u>access, through browser 15, by a user</u>
> <u>situated at client 10 to the</u>
> <u>network-based office functionality</u>
> <u>implemented by server 70 and to the</u>
> <u>same extent as if client PC 10 were</u>
> <u>directly connected to LAN 65</u>.

> Server 70 resides on LAN 65 to
> collectively implement, through
> separate internal LAN accessible
> application servers, various office
> processing applications (tasks)
> including, through client applications
> server 72, thin-client hosted
> application programs; through
> web-enabled application server 74,
> remotely-hosted web-enabled
> thin-client application programs;
> through e-mail server 76, e-mail
> messaging; and, through file
> server 78, shared file access."
> (Emphasis added).

Furthermore, Applicants' "**platform**" is claimed as "having:" "a processor", "a memory . . . first and second network interfaces . . ." and functionality described in the detailed wherein clause. While the Office action has made an attempt to show that the various aspects of the claimed apparatus are taught by Haung in view of Wei, Applicants respectfully disagree with the Office action because those aspects of the apparatus are cited in a piecemeal format that does not provide any teaching, suggestion or motivation for Applicants' claimed invention. Applicants further explain as follows.

Firstly, the Office action attempts to show a teaching of Applicants' "processor" and "memory" by citing to Haung at "Haung, col. 4, lines 18-46" and "Figure 15 and Col. 18, lines 62-67 - col. 19 lines 1-22", respectively. These citations (as well

as other citations) and any corresponding explanations
in the Office action ignore that each of these
elements are part of Applicants' "**platform**" and
Applicants' platform "provides through a corresponding
client application module implemented on the **platform**"
a functionality. (Claim 1, wherein clause, emphasis
added)

Applicants respectfully remind the Examiner
that obviousness cannot be made piecemeal. That is,
the Examiner cannot attempt to piece together the
claimed invention using the claims as a guide. "It is
impermissible to use the claimed invention as an
instruction manual or 'template' to piece together the
teachings of the prior art so that the claimed
invention is rendered obvious. . . . 'one cannot use
hindsight reconstruction to pick and choose among
isolated disclosures in the prior art to deprecate the
claimed invention.'" *In re* Fritch, 972 F.2d 1260, 23
USPQ2d 1780, 1784 (Fed. Cir. 1992)(quoting *In re* Fine,
837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir.
1988).

The Office action further states that "Haung
fails to explicitly teach bi-directional protocol
conversion of messages between remote client computer and
server, such that data provided by browser in a first
protocol is converted into a second protocol to be then
sent and executed by an application server and converting
output data from an application server back to the first

protocol for transmission to the client browser. Wei
however discloses these limitations substantially as
claimed, namely, converting messages intended for
applications sent by a client browser using the HTTP
protocol into remote desktop protocol (RDP) in order to
communicate with the application server and execute command
issued by the user. In addition, responses from
application are converted by the application server from
RDP to HTTP for transmission back to the client computer
via browser [Wei Figure 3, Col. 5 lines 49-53, Col. 6
lines 38-67 - Col. 7 lines 1-35]."

Wei at Col. 5, lines 49-53 states:

Using a computing architecture based on the
above-mentioned HTML-based GUI and a Remote
Display protocol such as X-Windows, RDP, or
ICA, the subject system can deliver almost
any application over the web, especially the
Internet.

and at Wei Col. 6, lines 38-67 to Col. 7,

lines 1-35 states:

Since the application is run on a backend
server, the computer power at the client is
minimal, making possible the use of handheld
portable computing devices. Since no programs
are downloaded and the client program is
minimal, there is no waiting at the client
side. Web pages powered by GUI components
based on JavaScript and Dynamic HTML offer a
pleasing full-featured Graphical User
Interface, with the system offering unlimited
scalability and high availability. The
subject system also enables universal access

to applications and data, eliminating
performance problems which blocked usage of
the Internet or slow local area networks for
network-based computing. Use of web pages and
associated browsers also offers high security
without bogging down performance through the
use of the Secure. HyperText Transfer
Protocol, HTTPS.

In one embodiment, the entire client program
is based on standard HTML technology, mainly
JavaScript, Dynamic HTML and Cascading Style
Sheet. This client program is extremely
lightweight but is able to construct a rich
full-featured graphical user interface with
the same look and feel as traditional
software running on Windows and Unix. An
application server and a web server reside
between the client and the server. While the
web server is responsible for handling HTTP
requests, the application application server
acts as a translation engine, translating the
server program's display information into web
pages using GUI components constructed on top
of HTML, ie. Javascript and DHTML, in real
time and translating client machine events
into the protocol that the backend server
understands. A typical computation process is
described below:

1. User goes to a client machine's web
browser, enters the URL of the web server;
2. Upon the HTTP request, the web server
sends back an HTTP response to the user's web
browser. The response may or may not contain
requests asking the user to log on.
3. Upon the successful validation of the user
if logon is required, an HTML page is
displayed in the client machine that contains
information about available applications to
that specific user.
4. User clicks on one of the applications.
Upon the click, the client program
automatically launches a window representing
the graphical user interface of that

application. At the same time, the user click
information is sent back to the web server;
5. Upon receipt of the user click
information, the web server may load a
predetermined HTML page on the web server and
send it back to the web browser, or just pass
the information to the application server;
6. Upon receipt of that information, the
application server may just do some local
processing and send the processing result
back to the web server; or the application
server will send the information to the
appropriate backend server via an appropriate
protocol determined beforehand.
7. The backend server responds to the
received information, such as opening a file
or popping up a message box. The response of
the backend server is sent to the application
server via a predetermined protocol;
8. Upon receipt of the response, the
application server translates the response
into HTML, utilizing GUI components
constructed beforehand if necessary, and
sends it to the web server.
9. The web server sends the translated HTTP
response from the application server to the
client web browser;
10. Upon receiving the response from the web
server, client web browser performs
processing as programmed.
11. User generates another request and the
above process repeats in a similar fashion.

The Office action further states that "[b]oth
Huang and Wei are concerned with executing applications
through use of a web browser on a remote server using the
HTTP protocol. Therefore it would have been obvious to one
of ordinary skill in the art at the time the invention was
made to incorporate the converting of messages sent by a
client browser from one protocol into a second protocol
used by the specific application server and further

converting back any responses sent by the application server from the second protocol to the first protocol for communication with the client browser, as taught by Wei into the invention of Huang, in order to provide a good performing system for running web-based application and to allow two computers using different protocols to be able to communicate and successfully execute commands remotely."

Again, Applicants note that the rejection, in its various components, fails to recognize that platform of the claimed invention. A simple review of Applicants' Figures, particularly Figures 1 and 2 as compared to those of Haung and Wei illustrate the significant differences between Applicants' invention and Applicants' use of a platform and the inventions of Haung and Wei individually or in combination, which do not provide any teaching, suggestion or motivation for Applicants' claimed invention.

For all of the above stated reasons, Applicants respectfully submit that there is not teaching, suggestion or motivation of Applicants' "**platform**" or Applicants' invention of claim 1. Therefore, Applicants request that claim 1 be allowed.

Claim 11

For all of the above stated reasons with respect to claim 1, claim 11 is not obvious and Applicants respectfully request that claim 11 be allowed.

Claims 2-10 and 12-20

Claims 2-10 depend from independent claim 1, and claims 12-20 depend from independent claim 11. For all of the above stated reasons, Applicants respectfully note that the dependent claims are not obvious and request that they be allowed.

Conclusion

Thus, the Applicants submit that none of the claims, presently in the application, is a obvious under the provisions of 35 USC § 103.

Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

Respectfully submitted,

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